

Pound-Foolish

We no longer can afford to cut physical education and good nutrition.

By David Satcher

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A century ago, overweight often was a superficial sign of prosperity and good living. High-society dinners of the Gilded Age, for example, consisted of four, five, six, and sometimes even more courses: caviar, foie gras, oysters, terrapin, game. Such dinners certainly gave new meaning to Thorstein Veblen's 1899 phrase "conspicuous consumption." But why not live it up if you could, when you could? After all, the life expectancy in 1900 was only about 47 years. Fortunately, few people ate so lavishly then, and since the Gilded Age we have been able to peer beneath the surface to understand the effects of nutrition—good and bad—on the human body. Additionally, advances in science and medicine nearly have eliminated in America the infectious diseases that reached epidemic proportions a hundred years ago. Despite opening with a life expectancy of about 47 years, the 20th century successfully closed with a life expectancy of about 77 years.

What took a century to attain, however, could be undermined in a few decades if we do not respond to the 21st century's own epidemic: obesity. While as a nation we have made serious strides in improving our health in terms of infectious diseases, heart disease, and several forms of cancer, we have failed when it comes to recognizing, understanding, and addressing our overweight and its effects on our health. Indeed, the Age of Girth has displaced the Gilded Age. Then, few people enjoyed overeating and indulgence; now, most of us are swayed by super sizes. The bicycle craze of a hundred years ago, moreover, has been replaced by the television craze of today. Consequently, obesity is this century's pneumonia. It is this century's TB. It is this century's typhoid. Obesity is not an aesthetic issue; it is a health one. It may not be infectious, but it is epidemic: In 1999, an estimated 61 percent of U.S. adults were overweight or obese, and 13 percent of children and adolescents were overweight.

Fortunately, curing obesity in most cases does not take years of complex research; instead, it takes behavioral change enabled by comprehensive actions on the part of individuals, families, schools, communities, worksites, media, states, and the nation. Of these enablers, schools hold perhaps the most crucial role in effecting change, for adult obesity can be prevented in youth. As I suggest in my December 2001 "Call to Action to Prevent and Decrease Overweight and Obesity," schools are identified as one of five key settings for public-health strategies to prevent and decrease the prevalence of overweight and obesity via

a CARE framework, which stands for communication, action, research, and evaluation. **The basic fact of the matter is that children and adolescents spend a large portion of time in school, and schools offer many existing and potential opportunities to engage them in healthy eating and physical activity to reinforce positive messages about diet and exercise. At the risk of sounding trite, I will reiterate that today's youths are tomorrow's leaders. We must prime our children academically, but academic success will be moot if a student does not realize her or his potential because of poor health and/or an abbreviated life.**

Academic achievement and good nutrition and exercise, in fact, are not mutually exclusive. Studies continue to confirm that when children's and adolescents' basic nutritional and fitness needs are met, they learn better. Unfortunately, the reverse is true as well. In one study of 4th graders, for example, those who had the lowest amount of protein in their diets posted the lowest achievement scores. Additional research suggests that skipping breakfast has a negative effect on cognitive performance. On the other hand, proper nutrition in the form of participation in the school breakfast program improves school performance, increases composite math and reading scores, and improves student behavior. Physical activity is an integral part of this equation, because providing more time for increased physical activity (by reducing class time) leads to increased test scores. Specifically, one longitudinal study has found that redirecting 240 minutes per week of class time from academics to physical activity consistently led to higher mathematics scores. Good nutrition and proper exercise in schools can help to bolster academic achievement.

Despite what we know about the positive links between nutrition, exercise, and student achievement, America's young people face a health crisis. We see every day that overweight knows no boundaries of age. The factors that contribute to overweight youths—poor nutrition and decreased physical activity—have infiltrated school buildings, where children should thrive instead of being stifled by the negative consequences of these forces. The past 20 years have witnessed nearly double the number of overweight children and nearly triple the number of overweight adolescents. From 1991 to 1999, moreover, the percentage of students who attended daily physical education classes declined from 42 percent to 29 percent.

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These statistics should alarm us as educators. Overweight and obesity present a challenge as crucial as youth violence and teenage smoking, for when kids suffer, our communities and our nation suffer. Given that overweight children are much more likely to become obese adults, we should keep in mind that in 2000 alone, the United States spent nearly \$120 billion on direct and indirect costs attributable to obesity. Today's overweight kids, who already have to contend

with the negative psychosocial effects of heaviness, most likely will suffer the dire health consequences of adult obesity: diabetes, coronary heart disease, and hypertension. In fact, Type II diabetes no longer is called "adult onset diabetes," for it now affects adolescents and young adults.+

Of course, schools most definitely are not to blame for the proliferation of overweight among children and adolescents, and many factors outside school hours contribute to this new epidemic. **Countercurrents of competitive, unhealthy foods that generate school income and cuts in physical education budgets nevertheless do threaten to undermine existing school-based efforts to integrate sound nutrition and fitness practices into the curriculum.** Classroom learning on good nutrition and physical fitness will remain theoretical if students have only limited healthful food options, limited physical-activity time, and unlimited access to soda vending machines. Change must be comprehensive: from state leaders who allocate education budgets, to teachers who can directly educate children and adolescents on good diet and exercise, to parents and caregivers who reinforce the models of good nutrition and fitness that students take from home to school and from school to home.

My "Call to Action" as U.S. surgeon general outlines ways for schools to address the epidemic that confronts us. Under the CARE framework, state departments of education, school districts, and school buildings can work on the following levels:

- **Communication.** Build awareness among and educate teachers, food-service staff, coaches, nurses, and other school staff members about proper nutrition and activity as both relate to lifelong healthy weight, and about school physical activity and nutrition programs and policies.
- **Action.** Ensure that meals offered through school breakfast and lunch programs meet nutrition standards; provide healthful food options in vending machines and school stores; prohibit student access to vending machines and school stores that compete with healthful food choices; and provide all K-12 children with quality daily physical education.
- **Research and Evaluation.** Evaluate school-based behavioral-health interventions for the prevention of overweight in children; and conduct research to study the effect of school policies such as food services and physical activity on overweight in children and adolescents.

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In addition to promoting CARE in families and communities, schools, health care, worksites, and the news media, I was pleased to serve as the chairman of the Healthy Schools Summit: Taking Action for Children's Nutrition and Fitness, which took place in Washington last week. ("**Healthy Schools Summit Weighs**

In on Obesity," this issue.) More than 30 actively concerned organizations and associations hosted leaders in education, nutrition, and fitness in an effort designed to launch healthy school environments across the country. The summit was a direct response to the "Call to Action." More information on the concrete undertakings initiated at the summit to aid states in their battles against childhood overweight and other urgent child-health problems is available online at www.actionforhealthykids.org.

There is much action ahead of us. But consider the point that Nora Howley, the project director for school health at the Council of Chief State School Officers, made during a July news conference on childhood overweight. Commenting on the fact that our nation spends approximately \$120 billion a year in direct and indirect costs related to obesity, Ms. Howley appealed, "Think what we could be doing for our schools with \$120 billion a year." I ask you to think about it. Indeed, such a redirection of funds is staggering. I recently had a chance to talk about overweight and obesity with Bernard Holloway, a Maryland high school student who serves as first vice president of the state's association of student councils. He said that the money schools invest now on this problem at local and state levels will be a "down payment" that ultimately saves lives.

We no longer can afford to cut physical education and good nutrition; doing so may be penny-wise, but it is literally pound-foolish. Our "down payment" does not have to be monetary; it initially can be in the form of awareness.

As I will say time and again, I do not blame schools for our obesity epidemic. Instead, I look to schools—and to everyone who has an influential hand in education—as a powerful force for change. For the health of the nation, we all must heed my "Call to Action" now by caring, through CARE, about our students' health.

Dr. David Satcher was the 16th surgeon general of the United States, serving from 1998 to 2002. Prior to that, he was the director of the federal Centers for Disease Control and Prevention. This fall, he assumes duties as the director of the National Center for Primary Care at Morehouse College in Atlanta.

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